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GRY-119US

Appln. No.: 10/781,610
Amendment Dated March 15, 2006
Reply to Office Action of December 19, 2005

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Cancelled)
2. (Currently Amended) Actuator in accordance with claim ~~1~~ 6, further comprising a rod that is an integral part of the plate, the rod being located outside the E-shaped circuit.
3. (Previously Presented) Electromechanical valve control actuator for internal combustion engines, comprising an electromagnet with a magnet and with a mobile magnetic plate moving into the vicinity of the electromagnet, the magnet being located on a surface of the electromagnet opposite the plate, wherein the electromagnet comprises a E-shaped magnetic circuit, and the magnet is located at the end of a branch of the E-shaped circuit, wherein a plurality of branches of the E-shaped magnetic circuit are equipped with a respective plurality of magnets.
4. (Previously Presented) Actuator in accordance with claim 3, wherein at least one of the magnets has a cross section larger than a cross section of the branch on which the at least one magnet is located.
5. (Previously Presented) Electromechanical valve control actuator for internal combustion engines, comprising an electromagnet with a magnet and with a mobile magnetic plate moving into the vicinity of the electromagnet, the magnet being located on a surface of the electromagnet opposite the plate, wherein the electromagnet comprises a E-shaped magnetic circuit, and the magnet is located at the end of a branch of the E-shaped circuit, wherein the plate has a cross section that is smaller than a cross section of the end branches of the E-shaped circuit.
6. (Currently Amended) Electromechanical valve control actuator for internal combustion engines, comprising an electromagnet with a magnet and with a mobile magnetic plate moving into the vicinity of the electromagnet, the magnet being located on a surface of the electromagnet opposite the plate, wherein the electromagnet comprises a E-shaped

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magnetic circuit, and the magnet is located at the end of a branch of the E-shaped circuit.
~~Actuator in accordance with claim 1 or 2,~~ wherein the cross section of an end branch of the circuit is smaller than half the cross section of a central branch of the circuit.

7. (Currently Amended) Electromechanical valve control actuator for internal combustion engines, comprising an electromagnet with a magnet and with a mobile magnetic plate moving into the vicinity of the electromagnet, the magnet being located on a surface of the electromagnet opposite the plate, wherein the electromagnet comprises a E-shaped magnetic circuit, and the magnet is located at the end of a branch of the E-shaped circuit.
~~Actuator in accordance with claim 1 or 2,~~ wherein a cross section of a junction between an end branch of the E-shaped circuit and a central branch of the E-shaped circuit is smaller than half the cross section of the central branch of the circuit.

8. (Currently Amended) Internal combustion engine comprising an electromechanical valve control actuator in accordance with claim ~~1 or 2~~ 6.

9. (Previously Presented) Actuator in accordance with claim 3, further comprising a rod that is an integral part of the plate, the rod being located outside the E-shaped circuit.

10. (Previously Presented) Actuator in accordance with claim 5, further comprising a rod that is an integral part of the plate, the rod being located outside the E-shaped circuit.

11. (Previously Presented) Electromechanical valve control actuator for internal combustion engines, comprising an electromagnet with a magnet and with a mobile magnetic plate moving into the vicinity of the electromagnet, the magnet being located on a surface of the electromagnet opposite the plate, wherein the electromagnet comprises a E-shaped magnetic circuit, and the magnet is located at the end of a branch of the E-shaped circuit, and wherein a magnetic circuit formed by a central branch, an end branch of the E-shaped magnetic circuit, and a junction between this central branch and this end branch is open when the electromagnet does not generate a magnetic field.